

**REMARKS**

Claims 1, 12, 19, 24, 34, 40, 42, 43, and 48 are amended. Claims 1-52 remain in the application for consideration. In view of the following remarks, Applicant respectfully requests withdrawal of the rejections and forwarding of the application to issuance.

**The Rejections**

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,999,932 to Paul in view of U.S. Patent No. 6,199,102 to Cobb.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 5,459,717 to Mullan.

Claims 7-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 6,072,942 to Stockwell.

Claims 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 6,199,103 to Sakaguchi.

Claims 12-15, 24-27, 29, 30, 33-36, 38, 40 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Stockwell and Sakaguchi.

Claims 16, 23, 31, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb and Stockwell, Sakaguchi and Mullan.

Claims 17 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Stockwell, Sakaguchi and U.S. Patent No. 5,911,776 to Guck.

1           Claims 18, 28, and 39 stand rejected under 35 U.S.C. § 103(a) as being  
2 unpatentable over Cobb in view of Stockwell, Sakaguchi and Paul.

3           Claims 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable  
4 over Sakaguchi in view of Stockwell.

5           Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
6 over Sakaguchi in view of Stockwell and Guck.

7           Claim 42 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
8 over Cobb in view of Sakaguchi.

9           Claims 43-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable  
10 over Cobb in view of Sakaguchi and Stockwell.

11           Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
12 over Sakaguchi in view of Cobb, Stockwell, and Mullan.

13           Claim 47 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
14 over Sakaguchi in view of Cobb and Stockwell (U.S. Patent No. 6,144,934) in  
15 further view of Stockwell (U.S. Patent No. 6,072,942).

16           Claim 48 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
17 over Paul in view of Sakaguchi.

18           Claim 49 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
19 over Paul in view of Sakaguchi and Stockwell.

20           Claim 50 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
21 over Paul in view of Sakaguchi in further view of Cobb.

22           Claim 51 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
23 over Paul in view of Sakaguchi and Mullan.

24           Claim 52 stands rejected under 35 U.S.C. § 103(a) as being unpatentable  
25 over Paul in view of Sakaguchi and Guck.

1  
2       **Applicant's Disclosure**

3       Applicant's disclosure is directed to email filtering methods and systems.  
4       Various embodiments are specifically directed to systems that are focused on the  
5       server side of the equation, rather than on the client side. In these types of  
6       systems, email servers provide the bulk of the functionality that a client sees when  
7       the client enters the email environment. For example, email messages, records,  
8       passwords, user preferences, address lists, and the like are all saved on the server  
9       side in storage locations that are dedicated for each recipient. Recipients or clients  
10      must then typically log in with the server and run a browser program that lets them  
11      work within the email system to read their messages. Logging in with the server is  
12      typically accomplished over a computer network such as the Internet, and through  
13      the use of a suitable web browser. The email environment is generated by the  
14      server through the use of HTML or web pages that present the recipient or client  
15      with a screen that looks like an email box. All email messages are delivered using  
16      the web page format. Microsoft's Hotmail service is an exemplary system.

17      Email is a tremendously fast and efficient way to send electronic messages.  
18      One of the problems that plagues the efficient use of email, particularly in the  
19      context of server-side systems, is the growing presence of unwanted and  
20      unsolicited emails. These emails are typically referred to as "spam." Spam can  
21      include unsolicited commercial emails (UCE) or non-commercial emails. Spam is  
22      a menace that clogs email systems, slows down performance, and severely impacts  
23      the manner in which email services are provided by an email server to its clients.

24      From an operational standpoint, UCE or spam can consume vast amounts  
25      of disk space and can monopolize many other machine resources. For example, in

1 Applicant's Fig. 1 example, when an email message is received by server system  
2 22, a copy for each intended recipient is made and placed into the dedicated  
3 storage location for each recipient. In the illustrated example, processor 24  
4 receives a spam message and makes a copy of the spam message for each of the  
5 intended recipients, i.e. recipients 28, 30 and 32. If a large number of recipients  
6 are specified by the sender, then a large amount of server memory can be  
7 consumed by replicating the message and placing it in each dedicated storage  
8 location for each specified recipient.

9 From a customer service standpoint, system administrators are often at a  
10 loss to combat the delivery of spam to their individual clients. This can and often  
11 does result in large numbers of complaints and bounced email messages.  
12 Additionally, customers often do not wish to even receive certain types of morally  
13 or otherwise offensive emails. Yet, because the spammers (those who promulgate  
14 spam) predominate, innocent clients continue to be bombarded with unwanted  
15 email messages. From a legal standpoint, valuable time and resources are wasted  
16 in pursuing spammers because of the various havoc they wreak on network  
17 systems. Needless to say, spam continues to plague those who are in the business  
18 of providing email services to clients.

19 Accordingly, various embodiments of the claimed subject matter are  
20 directed to addressing the problems caused by spam and other unwanted emails in  
21 the context of a server-side email system. As explained below, the claims have  
22 been amended to focus with more particularity on the context in which various  
23 inventive embodiments are employed. However, before discussing the particular  
24 claim amendments, a brief discussion of the cited references is given in an attempt  
25

1 to provide an appreciation of the differences between the cited references and the  
2 claimed subject matter.

### 3 4 The Primary References to Paul, Cobb and Sakaguchi

5 The reference to **Paul** discloses a system for eliminating unsolicited  
6 electronic mail that generates and stores a user inclusion list including  
7 identification data for identifying e-mail desired by the user. Data from one or  
8 more fields of incoming electronic mail messages are compared with the  
9 identification data stored in the user inclusion list. If the electronic mail message  
10 data matches corresponding identification data from the user inclusion list, the e-  
11 mail message is marked with a first display code, such as "OK." If no match is  
12 detected, the system performs at least one heuristic process to determine whether  
13 the electronic mail message may be of interest to the user. If the message satisfies  
14 one or more criteria as determined by the heuristic process and is therefore of  
15 potential interest to the user, the message is marked with a second display code,  
16 such as "NEW." If the e-mail message does not satisfy any of the heuristic  
17 criteria, the e-mail message may be marked with a third display code, such as  
18 "JUNK." The processed e-mail messages are displayed to the user in a display  
19 mode corresponding to the display codes respectively assigned to the messages.

20 Paul's invention is described in the context of a user terminal software  
21 system (see Fig. 1) for eliminating unsolicited e-mail. The user terminal software  
22 system is a *client-side system* and includes an inclusion list manager 102 that  
23 creates, stores and automatically maintains a user inclusion list. The user  
24 inclusion list includes all identification data needed to determine the status of  
25

1 incoming e-mail messages. The user inclusion list may be created and maintained  
2 automatically and also modified manually by the user.

3 The *user terminal software system* of Fig. 1 is described to further include  
4 an e-mail storage database 106 that receives and stores incoming e-mail and stores  
5 records of outgoing e-mail. An e-mail filter 104 filters the incoming e-mail stored  
6 in store 106 in accordance with the user inclusion list stored in database 102. A  
7 user interface 108 receives inputs from the user and displays e-mail information to  
8 the user. The user interface 108 may be used, for example, to display a user's  
9 mailbox, receive and process e-mail messages and inputs from the user, manage  
10 the user's mailbox, and display mailbox management information to enable the  
11 user to manage the mailbox.

12 The e-mail filter 104 filters incoming mail received in the user's e-mail  
13 store 106 based upon three fields of data contained in the incoming e-mail, the  
14 "FROM" field, the "TO" field and the "SUBJECT" field. Filtering may also  
15 include the "CC" field and the "BCC" field to filter e-mail messages on which the  
16 user is listed as a CC or BCC recipient rather than a direct recipient.

17 Paul describes, in Fig. 3, a so-called server embodiment. There, the server  
18 enables filtering to be performed at a central location for all users within a network  
19 such as a *local area network* (LAN). As depicted in Fig. 3, an e-mail server 301  
20 receives and routes e-mail messages to and from a plurality of users such as A, B,  
21 C, and D attached to an electronic data network 300. The e-mail server may also  
22 receive e-mail from other networks 315. The e-mail server 301 includes an e-mail  
23 server message store 306 for receiving and storing all e-mail messages transmitted  
24 within the network 300 and an e-mail filter 304. An inclusion list processor 302  
25 stores and maintains at least one inclusion list for each e-mail address that is

1 serviced by the e-mail server 301. For example, in the network configuration  
2 depicted in Fig. 3, the inclusion list processor 302 maintains a separate user  
3 inclusion list for each user A, B, C and D. The operation of the components of the  
4 e-mail server 301 shown in Fig. 3 is similar to the corresponding components in  
5 the user terminal system of Fig. 1.

6 The *Cobb* reference discloses a system and method for filtering unsolicited  
7 electronic commercial messages. The disclosed system screens out unsolicited  
8 commercial messages by receiving the message from a sender, sending a challenge  
9 back to the sender, receiving a response to the challenge, and determining if the  
10 response is a proper response. Cobb's system appears to be a predominately  
11 *client-side system*. Cobb's Fig. 2 shows a block diagram of networking system  
12 with which the disclosed invention can work. The Internet system 50 is shown to  
13 include mail servers 52a-52c which utilize the standard protocol of Simple Mail  
14 Transfer Protocol (SMTP). A message 54 can be sent via one of the SMTP  
15 servers, such as the server 52a. The message may be passed through several  
16 servers before reaching its final destination, in this example, the server 52c. Once  
17 the message is received by the destination receiver 52c, then it is typically sent to a  
18 mailbox 56, such as a Post Office Protocol box (POP) or Internet Message Access  
19 Protocol box (IMAP) where it is held pending retrieval by an Email Client  
20 Program 60. During message retrieval, the message can be filtered through the  
21 Message Filter Program 58. Cobb discloses that the Message Filter 58 can be  
22 located between the Mailbox 56 and the user's Email Client Program 60 (as is  
23 illustrated); as part of mailbox servers such as Mailbox 56, or in the Email Client  
24 Program 60 which actually processes the user's messages.

1       The **Sakaguchi** reference discloses a system that can generate  
2 determination conditions and determine whether email is junk email based on one  
3 determination condition. The system comprises a junk electronic mail  
4 determination processing section for determining whether or not a given electronic  
5 mail piece, through an input section, is junk based on the determination condition  
6 stored in a junk electronic mail determination condition storage section. An  
7 estimated junk electronic mail storage section stores the electronic mail piece if  
8 the electronic mail piece is determined to be junk. A junk electronic mail  
9 exemplification learning section analyzes content information of the electronic  
10 mail piece stored in the storage section and extracts a feature amount to determine  
11 that electronic mail is junk, and adds the extracted feature amount to the junk  
12 electronic mail determination condition storage section as a junk electronic mail  
13 determination condition. A keyword vector is used as the determination condition.

14       Fig. 6 shows an exemplary computer system that is suitable for practicing  
15 the embodiments described by Sakaguchi. The Fig. 6 system is a personal  
16 computer which suggests a purely *client-side solution*. Furthermore, the nature of  
17 the problem that Sakaguchi addresses, as specified in its “Background” section, is  
18 that of a “conventional electronic mail reception unit” (see, e.g. column 1, lines 9-  
19 18).

## 20 21       **The Secondary References**

22       The secondary references used in the Office’s combination, and which are  
23 not discussed above, are the references to Stockwell (Patent Nos. 6,072,942 and  
24 6,144,934), Mullan, and Guck.  
25



1       The reference to *Stockwell (the '942 patent)* discloses a system and method  
2 for filtering electronic mail messages. A message is received and processed  
3 through a one or more filter flows. Each filter flow is comprised of one or more  
4 self-contained nodes which can be combined in whatever order is required to  
5 ***enforce a given security policy.*** Node independence provides a policy-neutral  
6 environment for constructing filter flows. A filter flow may be as simple as  
7 forwarding the mail to the intended recipient, or may perform one or more checks  
8 where it decides whether to forward, reject, return (or some combination thereof)  
9 the message. Certain node types are also able to append information on to a mail  
10 message, while others are able to modify certain parts of a mail message. Several  
11 of the node types are able to generate audit or log messages in concert with  
12 processing a mail message.

13       The reference to *Stockwell (the '934 patent)* discloses an electronic  
14 message filtering system and method in which a message is received as input to a  
15 filter and decomposed into a set of components. The set of components is then  
16 processed through a pattern matching algorithm to determine if the message  
17 contents contain patterns inherent in a specified pattern, such as a natural  
18 language. The results of the pattern match analysis are output by the filter.

19       The reference to *Mullan* discloses a method and apparatus for routing a  
20 message embodied in a signal received by an electronic messaging system. The  
21 method includes formatting a search key using address codes parsed from a user  
22 address specified in the message, where each of the address codes corresponds to a  
23 different level of specificity for the user address. An attempt is made to retrieve a  
24 record from a database of routing information using the search key. If no record is  
25 found, the address code corresponding to the most detailed level of specificity in

1 the user address is stripped from the search key and another attempt is made to  
2 retrieve a record. This process continues until a record is successfully retrieved  
3 from the database or a predetermined base level of specificity is reached.

4 The reference to *Guck* discloses a network providing a server using an  
5 object-database that enables an author to create and store an original document, as  
6 a source file with a first format. Software in the data base provides multiple sets  
7 of shadow file-converter groups connected to the source file of the original  
8 document. Each shadow file-converter set enables the transformation of the  
9 original source file format into a particular other specific type of format. A client  
10 or user of the network can access and receive a copy of the original source  
11 document which is automatically reformatted to match the requirements of the  
12 receiver's appliance. Thus, one original source document can be created and then  
13 published in any specific format to multiple numbers of and types of receiving  
14 appliances.

#### 15 16 The Claim Amendments

17 **Claim 1** recites an email filtering method and has been amended to more  
18 specifically focus on the context in which the inventive embodiments are  
19 employed. In accordance with the recited method, at least one heuristic is defined  
20 that determines whether an incoming email message likely constitutes unsolicited  
21 commercial email by considering an established pattern that such unsolicited  
22 commercial email typically exhibits when it is sent. The recited heuristic is  
23 applied to at least one email message. This claim has been amended recite that the  
24 email message to which the heuristic is applied is one that is received by a web  
25 server that comprises part of a web-based email system in which, for at least some

1 users of the system, a client user interface email environment is generated  
2 through use of HTML or web pages. Support for this feature is provided in the  
3 specification, particularly on page 1, lines 15-25 through page 2, lines 1-15.  
4 Additionally, a specific commercial embodiment in which the inventive method  
5 can be practiced is disclosed starting on page 21, line 20. In accordance with the  
6 recited method, at least one email message is redirected if application of the  
7 heuristic indicates that the email message likely constitutes unsolicited  
8 commercial email.

9 In making out the rejection of this claim, the Office argues that Paul  
10 discloses an email filtering system as recited, but does not disclose the redirection  
11 feature which is provided by Cobb. In view of the amendment of this claim which  
12 more particularly focuses on the context in which the inventive embodiments are  
13 employed, Applicant traverses the Office's rejection. None of the references cited  
14 by the Office disclose or suggest an email filtering method in which at least one  
15 heuristic is applied to an email message *that is received by a web server that*  
16 *comprises part of a web-based email system in which, for at least some users of*  
17 *the system, a client user interface email environment is generated through use*  
18 *of HTML or web pages.* Accordingly, for at least this reason, claim 1 is  
19 allowable.

20 **Claims 2-11** depend either directly or indirectly from claim 1 and are  
21 allowable as depending from an allowable base claim. These claims are also  
22 allowable for their own recited features which, in combination with those recited  
23 in claim 1, are neither disclosed nor taught by the references of record, either  
24 singly or in combination with one another.  
25

1 In addition, with respect to those claims that are rejected in further view of  
2 Mullan, Stockwell, and Sakaguchi, those references are not seen to add anything  
3 of significance given the amendment to claim 1.

4 **Claim 12** recites an email filtering method. In accordance with the recited  
5 method, an email message is received at an email server that maintains inboxes for  
6 individual recipients. The email message is addressed to a plurality of recipients.  
7 This claim has been amended to recite that *the email server comprises part of an*  
8 *Internet-based email system in which, for at least some users of the system, a*  
9 *client user interface email environment is generated through use of HTML or*  
10 *web pages*. In accordance with the recited method, a score is calculated for the  
11 email message at the server location based upon at least one of (a) the size of the  
12 email message, and (b) the number of specified recipient addresses. The score is  
13 compared with a threshold value that defines a likelihood of whether an email  
14 message constitutes an unwanted email message. Responsive to the email  
15 message exceeding the threshold value, a copy of the email message is placed at a  
16 first location other than any of the intended recipients' inboxes. A notification is  
17 sent to the intended recipients that a copy of an email message that was intended  
18 for them has been placed at the first location.

19 In making out the rejection of claim 12, the Office argues that the  
20 combination of Cobb and Stockwell teach the recited subject matter except for  
21 calculating a score based on the patterns and comparing this score to a threshold  
22 which, if exceeded, places the email in a location and sends a notification to the  
23 intended recipient. The Office then argues that Sakaguchi teaches the missing  
24 feature. In view of the amendment of this claim which more particularly focuses  
25 on the context in which the inventive embodiments are employed, Applicant

1 traverses the Office's rejection. Specifically, none of the references cited by the  
2 Office disclose or suggest receiving an email message at an email server, where  
3 the *email server comprises part of an Internet-based email system in which, for*  
4 *at least some users of the system, a client user interface email environment is*  
5 *generated through use of HTML or web pages.* Accordingly, for at least this  
6 reason, this claim is allowable.

7       **Claims 13-18** depend from claim 12 and are allowable as depending from  
8 an allowable base claim. These claims are also allowable for their own recited  
9 features which, in combination with those recited in claim 12, are neither disclosed  
10 nor taught by the references of record, either singly or in combination with one  
11 another.

12       In addition, with respect to those claims that are rejected in further view of  
13 Mullan, Guck and Paul, those references are not seen to add anything of  
14 significance given the amendment to claim 12.

15       **Claim 19** recites a computer program stored on one or more computer  
16 readable media for processing email and comprising the steps of receiving an  
17 email message at a server location, wherein the email message being addressed to  
18 a plurality of recipients. This claim has been amended to recite that *the server*  
19 *location comprises one or more servers that comprise part of an Internet-based*  
20 *email system in which, for at least some users of the system, a client user*  
21 *interface email environment is generated by the system through use of HTML or*  
22 *web pages that are sent via the Internet to client devices and used by a browser*  
23 *executing on a client device to render the user interface email environment.*

24       In view of the amendment of this claim which more particularly focuses on  
25 the context in which the inventive embodiments are employed, Applicant traverses

1 the Office's rejection. Specifically, none of the references cited by the Office  
2 disclose or suggest this feature. Accordingly, this claim is allowable.

3 **Claims 20-23** depend from claim 19 and are allowable as depending from  
4 an allowable base claim. These claims are also allowable for their own recited  
5 features which, in combination with those recited in claim 19, are neither disclosed  
6 nor taught by the references of record, either singly or in combination with one  
7 another.

8 In addition, with respect to those claims that are rejected in further view of  
9 Mullan and Guck, those references are not seen to add anything of significance  
10 given the amendment to claim 19.

11 **Claim 24** recites a programmed email server that contains computer-  
12 readable instructions which, when executed by the email server, perform steps  
13 comprising determining whether an email message that is received by the email  
14 server likely constitutes an unwanted email message. This claim has been  
15 amended to recite that *the email server comprises part of a web-based email*  
16 *system in which, for at least some users of the system, a client user interface*  
17 *email environment is generated through use of HTML or web pages that are*  
18 *sent to client devices.*

19 In view of the amendment of this claim which more particularly focuses on  
20 the context in which the inventive embodiments are employed, Applicant traverses  
21 the Office's rejection. Specifically, none of the references cited by the Office  
22 disclose or suggest this feature. Accordingly, this claim is allowable.

23 **Claims 25-33** depend from claim 24 either directly or indirectly and are  
24 allowable as depending from an allowable base claim. These claims are also  
25 allowable for their own recited features which, in combination with those recited

1 in claim 24, are neither disclosed nor taught by the references of record, either  
2 singly or in combination with one another.

3 In addition, with respect to those claims that are rejected in further view of  
4 Paul and Mullan, those references are not seen to add anything of significance  
5 given the amendment to claim 24.

6 **Claim 34** recites an email screening method. In accordance with the  
7 recited method, a profile of unsolicited commercial email is developed based upon  
8 the size of an email message and the number of specified recipient addresses of the  
9 email message. A mail server that is responsible for storing and distributing email  
10 messages to a plurality of clients is configured with a filter processor that is  
11 programmed to evaluate email messages that are received in light of the developed  
12 profile. This claim has been amended to recite that the mail server *comprises part*  
13 *of a web-based email system in which, for at least some users of the system, a*  
14 *client user interface email environment is generated through use of HTML or*  
15 *web pages that are sent to client devices.*

16 In view of the amendment of this claim which more particularly focuses on  
17 the context in which the inventive embodiments are employed, Applicant traverses  
18 the Office's rejection. Specifically, none of the references cited by the Office  
19 disclose or suggest this feature. Accordingly, this claim is allowable.

20 **Claims 35-39** depend either directly or indirectly from claim 34 and are  
21 allowable as depending from an allowable base claim. These claims are also  
22 allowable for their own recited features which, in combination with those recited  
23 in claim 34, are neither disclosed nor taught by the references of record, either  
24 singly or in combination with one another.  
25

1 In addition, with respect to those claims that are rejected in further view of  
2 Guck and Paul, those references are not seen to add anything of significance given  
3 the amendment to claim 34.

4 **Claim 40** recites an email delivery method. In accordance with the recited  
5 method, a bulk email folder is established in which bulk email is to be stored. An  
6 email server is configured to receive email messages and deliver them either to  
7 multiple server storage locations that are dedicated to storing email messages for  
8 respective recipients or to a single, shared location that can be shared by a  
9 plurality of the recipients. This claim has been amended to recite that *the email*  
10 *server comprises part of an email system in which, for at least some users of the*  
11 *system, a client user interface email environment is generated through use of*  
12 *HTML or web pages that are sent to client devices.*

13 In view of the amendment of this claim which more particularly focuses on  
14 the context in which the inventive embodiments are employed, Applicant traverses  
15 the Office's rejection. Specifically, none of the references cited by the Office  
16 disclose or suggest this feature. Accordingly, this claim is allowable.

17 **Claim 41** depends from claim 40 and is allowable as depending from an  
18 allowable base claim. This claim is also allowable for its own recited features  
19 which, in combination with those recited in claim 40, are neither disclosed nor  
20 taught by the references of record, either singly or in combination with one  
21 another.

22 **Claim 42** recites an email screening method. In accordance with the  
23 recited method, a profile of unwanted email messages is developed based upon  
24 whether an email message is similar in content to another email message. A mail  
25 server that is responsible for storing email messages for a plurality of clients is



1 configured with a filter processor that is programmed to evaluate email messages  
2 that are received in light of the developed profile. This claim has been amended to  
3 recite that *the mail server comprises part of an email system in which, for at least*  
4 *some users of the system, a client user interface email environment is generated*  
5 *through use of HTML or web pages that are sent to client devices.*

6 In view of the amendment of this claim which more particularly focuses on  
7 the context in which the inventive embodiments are employed, Applicant traverses  
8 the Office's rejection. Specifically, none of the references cited by the Office  
9 disclose or suggest this feature. Accordingly, this claim is allowable.

10 **Claim 43** recites an email screening method. In accordance with the  
11 recited method, an index is defined having values that are assigned to various  
12 degrees of desirability that an email message can have. The degrees of desirability  
13 are recited to extend from a low degree of desirability to a high degree of  
14 desirability. A plurality of parameters having parameter values are associated with  
15 the various degrees of desirability and at least some of the parameters do not  
16 depend on any message that is conveyed by any content of an email message. A  
17 user interface is established through which a user can adjust either (a) individual  
18 parameter values that, in turn, establish a degree of desirability, or (b) index values  
19 that themselves establish a degree of desirability that email messages must have in  
20 order to be saved to dedicated user storage locations. This claim has been  
21 amended to recite that a computing device is used to evaluate incoming email  
22 messages against the index value that is defined by the user. The computing  
23 device is specified to *comprise part of an email system in which, for at least*  
24 *some users of the system, a client user interface email environment is generated*  
25 *through use of HTML or web pages that are sent to client devices.*

1 In view of the amendment of this claim which more particularly focuses on  
2 the context in which the inventive embodiments are employed, Applicant traverses  
3 the Office's rejection. Specifically, none of the references cited by the Office  
4 disclose or suggest this feature. Accordingly, this claim is allowable.

5 **Claims 44-47** depend from claim 43 and are allowable as depending from  
6 an allowable base claim. These claims are also allowable for their own recited  
7 features which, in combination with those recited in claim 43, are neither disclosed  
8 nor taught by the references of record, either singly or in combination with one  
9 another.

10 **Claim 48** recites an email server system comprising a user storage database  
11 configured to store user information including email messages that are intended  
12 for individual users. A server is configured to receive email messages that are  
13 intended for various users and store the email messages in dedicated user storage  
14 locations within the user storage database. The server is further configured to  
15 screen email messages based upon a set of heuristics that determine whether an  
16 email message likely constitutes an unwanted email message and places a single  
17 copy of an email message in a storage location that is not a dedicated user storage  
18 location if it is determined by screening the email message that it likely constitutes  
19 an unwanted email message. This claim has been amended to recite that *the*  
20 *system comprises an Internet-based system that is configured to send email*  
21 *messages to users in a format in which a user's browser application processes*  
22 *the email messages and provides a user interface for a user to view the email*  
23 *messages.*

24 In view of the amendment of this claim which more particularly focuses on  
25 the context in which the inventive embodiments are employed, Applicant traverses

1 the Office's rejection. Specifically, none of the references cited by the Office  
2 disclose or suggest this feature. Accordingly, this claim is allowable.

3 **Claims 49-52** depend from claim 48 and are allowable as depending from  
4 an allowable base claim. These claims are also allowable for their own recited  
5 features which, in combination with those recited in claim 48, are neither disclosed  
6 nor taught by the references of record, either singly or in combination with one  
7 another.

### 8 9 **Conclusion**

10 All of the claims are in condition for allowance and Applicant respectfully  
11 requests a Notice of Allowability be issued forthwith. If the next anticipated  
12 action is to be anything other than issuance of a Notice of Allowability, Applicant  
13 respectfully requests a telephone call for the purpose of scheduling an interview.  
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1        **Version of the Claims with Markups to Show Changes**

2  
3        1.        (Amended) An email filtering method comprising:

4            defining at least one heuristic that determines whether an incoming email  
5 message likely constitutes unsolicited commercial email by considering an  
6 established pattern that such unsolicited commercial email typically exhibits when  
7 it is sent;

8            applying said at least one heuristic to at least one email message that is  
9 received by a web server that comprises part of a web-based email system in  
10 which, for at least some users of the system, a client user interface email  
11 environment is generated through use of HTML or web pages; and

12            redirecting said at least one email message if application of said at least one  
13 heuristic indicates that said at least one email message likely constitutes  
14 unsolicited commercial email.

15  
16        12.       (Amended) An email filtering method comprising:

17            receiving an email message at an email server that maintains inboxes for  
18 individual recipients, wherein the email message is addressed to a plurality of  
19 recipients, the email server comprising part of an Internet-based email system in  
20 which, for at least some users of the system, a client user interface email  
21 environment is generated through use of HTML or web pages;

22            calculating a score for the email message at the server location based upon  
23 at least one of (a) the size of the email message, and (b) the number of specified  
24 recipient addresses;

1 comparing the score with a threshold value that defines a likelihood of  
2 whether an email message constitutes an unwanted email message;

3 responsive to the email message exceeding the threshold value, placing a  
4 copy of the email message at a first location other than any of the intended  
5 recipients' inboxes; and

6 sending a notification to the intended recipients that a copy of an email  
7 message that was intended for them has been placed at the first location.

8  
9 19. (Amended) A computer program stored on one or more computer  
10 readable media for processing email, the program comprising the following steps:

11 receiving an email message at a server location, the email message being  
12 addressed to a plurality of recipients, the server location comprising one or more  
13 servers that comprise part of an Internet-based email system in which, for at least  
14 some users of the system, a client user interface email environment is generated by  
15 the system through use of HTML or web pages that are sent via the Internet to  
16 client devices and used by a browser executing on a client device to render the  
17 user interface email environment;

18 placing only one copy of the email message at a first storage location that is  
19 not a dedicated storage location for just one of the intended recipients; and

20 notifying each of the intended recipients that an email message intended for  
21 them has been placed at the first location.

22  
23 24. (Amended) A programmed email server that contains computer-  
24 readable instructions which, when executed by the email server, perform the  
25 following steps:

1 determining whether an email message that is received by the email server  
2 likely constitutes an unwanted email message, the email server comprising part of  
3 a web-based email system in which, for at least some users of the system, a client  
4 user interface email environment is generated through use of HTML or web pages  
5 that are sent to client devices; and

6 if the email message likely constitutes an unwanted email message:

7 storing a copy of the email message at a first storage location rather than  
8 individual storage locations that are dedicated to individual intended recipients of  
9 the email message; and

10 notifying intended recipients of the email message that an email message  
11 addressed to them has been received by the server.

12  
13 34. (Amended) An email screening method comprising:

14 developing a profile of unsolicited commercial email based upon the size of  
15 an email message and the number of specified recipient addresses of the email  
16 message;

17 configuring a mail server that is responsible for storing and distributing  
18 email messages to a plurality of clients with a filter processor that is programmed  
19 to evaluate email messages that are received in light of the developed profile, the  
20 mail server comprising part of a web-based email system in which, for at least  
21 some users of the system, a client user interface email environment is generated  
22 through use of HTML or web pages that are sent to client devices;

23 evaluating email messages with the filter processor and determining  
24 whether the email messages fit the developed profile; and  
25

1 if an email message fits the developed profile, initiating a remedial measure  
2 that ensures that the mail server does not make as many copies of the email  
3 message as there are specified recipient addresses.

4  
5 40. (Amended) An email delivery method comprising:  
6 establishing a bulk email folder in which bulk email is to be stored;  
7 configuring an email server to receive email messages and deliver them  
8 either to multiple server storage locations that are dedicated to storing email  
9 messages for respective recipients or to a single, shared location that can be shared  
10 by a plurality of the recipients, the email server comprising part of an email  
11 system in which, for at least some users of the system, a client user interface email  
12 environment is generated through use of HTML or web pages that are sent to  
13 client devices;

14 receiving an email message;  
15 comparing an address for the sender of the email message with a recipient's  
16 list of approved senders; and

17 delivering the email message to the single, shared location if: (a) the email  
18 message is not directly addressed to a recipient that is serviced by the server, and  
19 (b) the sender's address does not appear in the recipient's list of approved senders.

20  
21 42. (Amended) An email screening method comprising:  
22 developing a profile of unwanted email messages based upon whether an  
23 email message is similar in content to another email message;  
24 configuring a mail server that is responsible for storing email messages for  
25 a plurality of clients with a filter processor that is programmed to evaluate email

1 messages that are received in light of the developed profile, the mail server  
2 comprising part of an email system in which, for at least some users of the system,  
3 a client user interface email environment is generated through use of HTML or  
4 web pages that are sent to client devices;

5 evaluating email messages with the filter processor and determining  
6 whether the email message fits the developed profile; and

7 if the email message fits the developed profile, placing a copy of the email  
8 message in a first location and, rather than placing multiple copies of the email  
9 message in multiple dedicated client storage locations, notifying the multiple  
10 clients that an email message addressed to them has been received so that the  
11 clients can read the email message if they so desire.

12  
13 43. (Amended) An email screening method comprising:

14 defining an index having values that are assigned to various degrees of  
15 desirability that an email message can have, wherein the degrees of desirability  
16 extend from a low degree of desirability to a high degree of desirability;

17 associating a plurality of parameters having parameter values with the  
18 various degrees of desirability, wherein at least some of the parameters do not  
19 depend on any message that is conveyed by any content of an email message; and

20 establishing a user interface through which a user can adjust either (a)  
21 individual parameter values that, in turn, establish a degree of desirability, or (b)  
22 index values that themselves establish a degree of desirability that email messages  
23 must have in order to be saved to dedicated user storage locations; and

24 evaluating, using a computing device comprising part of an email system in  
25 which, for at least some users of the system, a client user interface email



1 environment is generated through use of HTML or web pages that are sent to  
2 client devices, incoming email messages against the index value that is defined by  
3 the user.

4  
5 48. (Amended) An email server system comprising:  
6 a user storage database configured to store user information including email  
7 messages that are intended for individual users; and

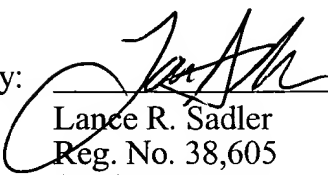
8 a server configured to receive email messages that are intended for various  
9 users and store the email messages in dedicated user storage locations within the  
10 user storage database;

11 wherein the server is further configured to screen email messages based  
12 upon a set of heuristics that determine whether an email message likely constitutes  
13 an unwanted email message, the server further being configured to place a single  
14 copy of an email message in a storage location that is not a dedicated user storage  
15 location if it is determined by screening the email message that it likely constitutes  
16 an unwanted email message, said system comprising an Internet-based system that  
17 is configured to send email messages to users in a format in which a user's  
18 browser application processes the email messages and provides a user interface for  
19 a user to view the email messages.  
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Respectfully Submitted,

Dated: 11/27/02

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